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Masato Sasaki

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EXAMINER

CARTON, MICHAEL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,917	Applicant(s) SASAKI ET AL.	
	Examiner MICHAEL CARTON	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 34-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 34-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Argument

1. Applicant's arguments filed 11/13/2009 have been fully considered but they are not persuasive.

With respect to the argument that there is no need to attach or remove extra members when the box is opened or closed, the examiner points out that only features which are claimed are rejected. The examiner has not found in any of the claims this limitation, however the limitation is also deemed functional which the art of record is capable of performing.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 7, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purdum (US Patent No. 5899088) in view of Gilman (US Patent No. 2808093).

With respect to claim 1, Purdum discloses a cold insulating container (seen in fig 1), the cold-insulating container comprising: a collapsible cold-insulating container comprising four peripheral walls (seen as the outer box in fig 1), a bottom face (the bottom portion of the box) and a flexible rectangle bottom face sheet (140 fig 2), the container forming a box with respective members, and being collapsible with each member overlapping with one another (a cardboard box as disclosed by Purdum is obviously collapsible), while the four peripheral walls, the bottom face and the bottom face sheet being connected with each other wherein the four

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peripheral walls are connected into a square shape (the outer box in fig 1 noted by 110 is square) so as to be foldable one another (when collapsing the outer box 110, the walls would obviously fold over one another), the bottom face are connected to the peripheral walls along lower side edges of the walls (this is an obvious feature of a square or cube shaped box), so as to be foldable into inward of the walls, the bottom face is formed enveloping a vacuum heat-insulating material therein column 9 lines 13-18), and the bottom face sheet is attached to the four peripheral walls along lower side edges of the walls with its four sides, so as to cover entire outer surface of the bottom face, when the bottom face is turned into a close position to form the box. The examiner notes that the manner in which a cardboard box is folded is a feature that Purdum's cardboard box 110 may accomplish and is an obvious feature. Furthermore, Purdum discloses in fig 1 the top flaps such as 120 being folded which imply the bottom panels may be folded similarly. This folding as shown meets the claimed limitations direct towards the folding of the bottom panel and the edges.

Pudum does not specifically disclose loading the container into a vehicle maintained at a higher than freezing temperature than the frozen products. Gilman discloses storing frozen products in a cold-insulating container (see fig 1) the cold-insulating container including a plurality of individual cold-insulating panels 11, 12, 16, 17 (fig 1), each of said panels including a solid heat insulating material (column 2 lines 22-26); and loading the cold-insulating container in a vehicle that is maintained at a temperature above a freezing temperature of the frozen products (column 1 lines 36-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Purdum by loading the container into a non-refrigerated vehicle as taught by Gilman

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for the purpose of increasing the thermal insulation of the container while also sealing any odors or moisture inside the container keeping the contents in a more protected state and not require a refrigerated vehicle to transport frozen goods saving on transportation costs.

With respect to claim 7, Purdum discloses that by "bracketing" the target temperature range between the phase change temperatures of the two materials, the latent heat of transformation associated with each material's phase change is advantageously utilized to maintain the temperature of the payload within the target temperature range (column 5 lines 19-23). Purdum further discloses in column 6 lines 20-33 that the target temperature can vary to any limitations imposed by specific application. Purdum does not specifically disclose the container including a phase change material with a melting point target temperature between -27 and -18 deg. Celsius. However, based on what is disclosed, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Purdum by including a melting point target temperature between -27 and -18 deg. Celsius, bracketing that range, and having the capability of obtaining the specified melting point, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claim 9, Purdum discloses the method of delivering frozen products except for the container having an internal capacity of at least 70L. It would have been an obvious matter of design choice to modify Purdum so that the container has an internal capacity of at least 70L, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

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With respect to claim 10, Purdum discloses a protective case for housing the cold-insulating container (fig 1) is provided, and the frozen products are delivered while the cold-insulating container is housed in the protective case (column 4, lines 51-67).

Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purdum (US Patent No. 5899088) in view of Gilman (US Patent No. 2808093) in view of Masaaki (Japan Publication No. 07-091594) in further view of Bane (US Patent No. 5441170).

With respect to claim 5, Purdum does not specifically disclose the cold insulating container is capable of housing frozen products at 0 deg. C for at least two hours, however Masaaki discloses the method of delivering frozen products of claim 1 wherein the cold-insulating product has outstanding insulation efficiency (paragraph 84 effect of invention), and Purdum is capable of housing frozen products at least at a predetermined percentage with respect to an internal capacity thereof. Masaaki does not state exact temperatures that are capable of being maintained. Bane, however, discloses maintaining a storage temperature using dry ice, or cubes of conventional ice as the cold storage agent (column 3 lines 47-50). Conventional ice has a core temperature of 0 Celsius and dry ice has a temperature of -78.5 Celsius. Using dry ice as taught by Bane with the insulating properties as taught by Masaaki would be well capable of maintaining 0 Celsius for two hours. It would be obvious to one ordinarily skilled in the art at the time the invention was made to modify Purdum by maintaining a temperature of up to 0 Celsius for two hours as taught by Bane for the purpose of transporting goods in a frozen state to maintain freshness.

With respect to claim 8, Purdum does not specifically disclose the cold-insulating container is capable of housing at least 1kg of the cold storage agent per internal capacity of 50 l,

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and maintaining an average inside temperature of up to 0 deg C for at least 10 hous. Masaaki discloses the method of delivering frozen products of claim 1 wherein the cold-insulating container is capable of housing at least 1kg of the cold storage agent per internal capacity of 50 L (paragraph 63), but does not disclose maintaining an average inside temperature up to 0 °C for at least 10 hours. Masaaki does not state exact temperatures that are capable of being maintained. Bane, however, discloses maintaining a storage temperature using dry ice, or cubes of conventional ice as the cold storage agent (column 3 lines 47-50). Conventional ice has a core temperature of 0 Celsius and dry ice has a temperature of -78.5 Celsius. Using dry ice as taught by Bane with the insulating properties as taught by Masaaki would be well capable of maintaining 0 Celsius for at least 10 hours. It would be obvious to one ordinarily skilled in the art at the time the invention was made to modify Purdum by maintaining a temperature of up to 0 Celsius for ten hours as taught by Bane for the purpose of transporting goods in a frozen state to maintain freshness.

4. Claims 2-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Purdum (US Patent No. 5899088) in view of Gilman (US Patent No. 2808093) in view of Masaaki (Japan Publication No. 07-091594).

With respect to claim 2, Purdum discloses the method of claim 1 except discloses the cold-insulating container includes a plurality of individual cold-insulating panels, each of the panels including a heat insulating material is structured so that a core material made by compression-molding a fiber material is covered with a gas-barrier jacket material, and an inside covered with the jacket material is depressurized for vacuum encapsulation.

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Masaaki discloses the cold-insulating container includes a plurality of individual cold-insulating panels (seen in fig 3 and the panel is implemented in fig 4 by being attached to a box), each of the panels including a heat insulating material is structured so that a core material made by compression-molding (paragraph 49 detailed description) a fiber material (paragraph 39 detailed description) is covered with a gas-barrier jacket material 2 (fig 1), and an inside covered with the jacket material is depressurized for vacuum encapsulation 7 (fig 4) (paragraph 36 detailed description).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Purdum by having the cold-insulating container includes a plurality of individual cold-insulating panels, each of the panels including a heat insulating material is structured so that a core material made by compression-molding a fiber material is covered with a gas-barrier jacket material, and an inside covered with the jacket material is depressurized for vacuum encapsulation as taught by Masaaki for the purpose of insulating the contents of the box for a longer period of time with known insulation materials.

With respect to claim 3, Purdum discloses the cold-insulating container except for including a plurality of individual cold-insulating panels, each of the panels including a heat insulating has a thickness ranging from 2 to 20 mm inclusive.

Masaaki discloses the cold-insulating container includes a plurality of individual cold-insulating panels (seen in fig 3 and the panel is implemented in fig 4 by being attached to a box), each of the panels including a heat insulating has a thickness ranging from 2 to 20 mm inclusive (paragraph 62 example).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Purdum by having a plurality of individual cold-insulating panels, each of the panels including a heat insulating has a thickness ranging from 2 to 20 mm inclusive as taught by Masaaki for the purpose of insulating the contents of the box with minimal insulation with known methods producing known results.

With respect to claim 4, Purdum discloses the cold-insulating container includes a plurality of individual cold-insulating panels, each of the panels including a heat insulating has an initial thermal conductivity up to 0.02 W/mK.

Masaaki discloses the cold-insulating container includes a plurality of individual cold-insulating panels (seen in fig 3 and the panel is implemented in fig 4 by being attached to a box), each of the panels including a heat insulating has an initial thermal conductivity up to 0.02 W/mK (paragraph 63 example).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Purdum with insulation as taught by Masaaki for the purpose of preserving products in the container with more modern insulation that is capable of storing products for a substantially longer amount of time.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Purdum in view of Gilman (US Patent No. 2808093) in view of Masaaki (Japan Publication No. 07-091594) in further view of Konarski (US Patent No. 6519968).

With respect to claim 6, Purdum, discloses all claimed elements in the method of delivering frozen products of claim 1 except for a cold-storage agent being housed in the cold-insulating container in an amount according to time taken for delivery. Konarski discloses a

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cold-storage agent being housed in the cold-insulating container in an amount according to time taken for delivery (column 3 lines 31-35). It would be obvious to one ordinarily skilled in the art at the time the invention was made to modify Purdum by adjusting the amount of cold-storage agent being housed in the cold-insulating container in an amount according to time taken for delivery as taught by Konarski for the purpose of ensuring the frozen product arrives to its destination in a frozen state.

Claims 34-36, 38-39, 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (US Publication No. 20040140345) in view of Masaaki (Japan Publication No. 07-091594).

With respect to claim 34, Kao discloses a collapsible cold-insulating container comprising four peripheral walls (120, 140, 150, 160 all seen in fig 1) a bottom face 130 (fig 1), the container forming a box 100 (fig 2 discloses the assembled box) with respective members, and a flexible rectangle bottom face sheet (paragraph 19 discloses other panels of paper or cardboard may be affixed to the bottom panel for adding strength) and being collapsible with each member overlapping with one another (fig 4 discloses the panels may be all folded for a compact storage position), while the four peripheral walls, the bottom face and the bottom face sheet being connected with each other (the panels are all still connected in fig 4), wherein the four peripheral walls are connected into a square shape so as to be foldable one another (the box is a square shape in all the figures when folded or unfolded), the bottom face are connected to the peripheral walls along lower side edges of the walls (fig 1 discloses edges 190 that connect all the panel members at the lower side edges of the walls), so as to be foldable inwardly, and the bottom face sheet is attached to the four peripheral walls along lower side edges of the peripheral

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walls with its four sides (190 fig 1), so as to cover entire outer surface of the bottom face, when the bottom face is turned into a close position to form the box.

Kao does not expressly disclose the bottom face is formed with a vacuum heat-insulating material enveloped therein.

Masaaki discloses a planar vacuum heat-insulating material (description of drawing 1). It would be obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao with the cold-insulating container with a vacuum heat-insulating material as taught by Masaaki for the purpose of improving insulating performance while thinning the insulating body with modern insulation that is well known.

With respect to claim 35, Kao discloses the cold-insulating container of claim 34 wherein two opposite peripheral walls adjacent to the peripheral walls connected to the bottom face have folding lines extending along height direction at middle portions thereof (the folding lines 190 in fig 1 extend along the height at middle portions), and are made foldable along the folding lines, and when the box is collapsed, the bottom face is folded into inward of the peripheral walls, the foldable walls are folded inwardly along the folding line to make the adjacent peripheral walls to approximate with each other, and the peripheral walls and the bottom face overlap with each other (seen in fig 4 and fig 2 the box may be folded in this manner).

With respect to claim 36, Kao discloses a collapsible cold-insulating container comprising four peripheral walls (120, 140, 150, 160 all seen in fig 1) a bottom face 130 (fig 1), the container forming a box 100 (fig 2 discloses the assembled box) with respective members, and a flexible rectangle bottom face sheet (paragraph 19 discloses other panels of paper or cardboard may be affixed to the bottom panel for adding strength) and being collapsible with

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each member overlapping with one another (fig 4 discloses the panels may be all folded for a compact storage position), while the four peripheral walls, the bottom face and the bottom face sheet being connected with each other (the panels are all still connected in fig 4), wherein the four peripheral walls are connected into a square shape so as to be foldable one another (the box is a square shape in all the figures when folded or unfolded), the bottom face are connected to the peripheral walls along lower side edges of the walls (fig 1 discloses edges 190 that connect all the panel members at the lower side edges of the walls), so as to be foldable inwardly, and the bottom face sheet is attached to the four peripheral walls along lower side edges of the peripheral walls with its four sides (190 fig 1), so as to cover entire outer surface of the bottom face, when the bottom face is turned into a close position to form the box.

Kao does not expressly disclose the bottom face is formed with a vacuum heat-insulating material enveloped therein. Masaaki discloses a planar vacuum heat-insulating material (description of drawing 1). It would be obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao with the cold-insulating container with a vacuum heat-insulating material as taught by Masaaki for the purpose of improving insulating performance while thinning the insulating body with modern insulation that is well known.

With respect to claim 38, Kao discloses the cold-insulating container of claim 36, wherein two opposite peripheral walls adjacent to the peripheral walls connected to the bottom faces have folding lines extending along height direction at middle portions thereof (190 fig 1 address folding lines on all of the side panels along the height direction at middle portions), and are made foldable along the folding lines, and when the box is collapsed, the bottom faces are folded into inward of the peripheral walls seen in figs 2 and 4), the foldable walls are folded

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inwardly along the folding line to make the adjacent peripheral walls to approximate with each other, and the peripheral walls and the bottom face overlap with each other (figs 2 and 4 show all the walls folded inwardly and overlapping. This folding technique may be applied to any of the embodiments of the boxes disclosed and would be obvious to fold any of the embodiments of the box as such for the purpose of storing the box in a compact manner).

With respect to claim 39, Kao discloses the cold-insulating container of claim 35, further comprising a foldable lid 110 (fig 1) connected along an upper edge 190 (fig 1) of the peripheral wall 120 (fig 1) adjacent to the foldable peripheral wall that is foldable along the folding line, wherein the container forms a box 100 (fig 2), and collapses to be overlapped while the lid is connected to the peripheral wall (fig 1 shows the box 100 collapsed while fig 4 and paragraph 24 details a method of collapsing a box with the panels overlapping).

With respect to claim 43 Kao discloses the cold-insulating container of claim 38 except wherein the lid is formed with vacuum heat-insulating material enveloped therein.

Masaaki discloses a planar vacuum heat-insulating material (description of drawing 1). It would be obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao with the cold-insulating container with a vacuum heat-insulating material as taught by Masaaki for the purpose of improving insulating performance while thinning the insulating body with modern insulation that is well known.

With respect to claim 44 Kao discloses the cold-insulating container of claim 34 except wherein the four peripheral walls are formed with vacuum heat-insulating material enveloped therein.

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Masaaki discloses a planar vacuum heat-insulating material (description of drawing 1). It would be obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao with the cold-insulating container with a vacuum heat-insulating material as taught by Masaaki for the purpose of improving insulating performance while thinning the insulating body with modern insulation that is well known.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (US Publication No. 20040140345) in view of Masaaki (Japan Publication No. 07-091594) in view of Kutun (US Publication No. 2004/0118854).

With respect to claim 37 Kao discloses the cold-insulating container of claim 36 further comprising: a flexible engaging flap 200 (fig 2). Kao does not disclose this flexible flap including hook-and-loop fastener disposed along a side edge of one of the bottom faces engaging with another bottom face, the hook-and-loop fastener disposed on the another bottom face at a portion corresponding to the engaging flap wherein turning the two bottom faces into a closed position matches side edges of both bottom faces and brings the engaging flap on the one bottom face into contact with the another bottom face to engage both hook-and-loop fasteners with each other.

Kutun discloses flaps of a box engaging with hook and loop fasteners (paragraphs 37-38). It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao by having the flaps engage with hook and loop fasteners as taught by Kutun for the purpose of closing the container and keeping it in a closed state.

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7. Claims 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (US Publication No. 20040140345) in view of Masaaki (Japan Publication No. 07-091594) in view of Mills (US Publication No. 20020134822).

With respect to claim 40, Kao discloses the cold-insulating container of claim 35, further comprising a foldable two lids 200, 110 (fig 1), wherein the container forms a box, and collapses to be overlapped while the lids are connected to the peripheral wall.

Kao does not expressly disclose the foldable two lids connected along upper edges 170c (fig 1) of the two peripheral walls that are connected to the bottom face 130 (fig 1). Kao simply discloses both lids connected to one peripheral wall. It would however be obvious to have an additional lid connected to the opposite peripheral side 140 (fig 1) since It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. In *re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

In the alternative, Mills discloses a collapsible box that has opposing top lids 16 (fig 1). It would be obvious to modify Kao with redundant lids as taught by Mills for the purpose of increased rigidity.

8. Claims 41-42, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (US Publication No. 20040140345) in view of Masaaki (Japan Publication No. 07-091594) in view of Mills (US Publication No. 20020134822) in view of Kutun (US Publication No. 2004/0118854).

With respect to claim 41 Kao discloses the cold-insulating container of claim 40 further comprising: a flexible engaging flap 200 (fig 2). Kao does not expressly disclose the flap includes a flexible hook-and-loop fastener disposed along a side edge of one of the lids engaging

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with another lid; and a hook-and-loop fastener disposed on the another lid at a portion corresponding to the engaging flap, wherein turning the two lids into a closed position matches side edges of both lids and brings the engaging flap on the one lid into contact with the other lid to engage both hook-and-loop fasteners each other.

Kutun discloses flaps of a box engaging with hook and loop fasteners (paragraphs 37-38). It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao by having the flaps engage with hook and loop fasteners as taught by Kutun for the purpose of closing the container and keeping it in a closed state.

With respect to claim 42 Kao the cold-insulating container of claim 40 further comprising: a flexible engaging flap 200 (fig 2). Kao does not expressly disclose the flap includes a hook-and-loop fastener disposed along an upper side edge of each of the two foldable peripheral walls so that the engaging flap is urged upwardly rather than laterally; and a hook-and-loop fastener disposed on each of the two lids at a portion corresponding to the hook-and-loop fastener on the engaging flap, wherein, when the two lids are turned into a closed position, the lids depress the engaging flaps and make contact therewith so that the hook-and-loop fasteners and corresponding ones engage with each other.

Kutun discloses flaps of a box engaging with hook and loop fasteners (paragraphs 37-38). It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao by having the flaps engage with hook and loop fasteners as taught by Kutun for the purpose of closing the container and keeping it in a closed state.

With respect to claim 47, Kao discloses the cold-insulating container of claim 41 further comprising: a flexible engaging flap 200 (fig 2). Kao does not expressly disclose the flap

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includes a hook-and-loop fastener disposed along an upper side edge of each of the two foldable peripheral walls so that the engaging flap is urged upwardly rather than laterally; and a hook-and-loop fastener disposed on each of the two lids at a portion corresponding to the hook-and-loop fastener on the engaging flap, wherein, when the two lids are turned into a closed position, the lids depress the engaging flaps and make contact therewith so that the hook-and-loop fasteners and corresponding ones engage with each other.

Kutun discloses flaps of a box engaging with hook and loop fasteners (paragraphs 37-38). It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify Kao by having the flaps engage with hook and loop fasteners as taught by Kutun for the purpose of closing the container and keeping it in a closed state.

9. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (US Publication No. 20040140345) in view of Masaaki (Japan Publication No. 07-091594) in view of Kutun (US Publication No. 2004/0118854) in view of Cohen (US Patent No. 5207376) in view of Wellner (US Patent No. 6155479).

With respect to claim 46, Kao discloses the cold-insulating container of claim 37, wherein two opposite peripheral walls adjacent to the peripheral walls connected to the bottom faces have folding lines 190 (fig 1) extending along height direction at middle portions thereof, and are made foldable along the folding lines (shown folded in fig 2), and when the box is collapsed, the bottom faces are folded into inward of the peripheral walls (fig 4 shows the box collapsed), the foldable walls are folded inwardly along the folding line to make the adjacent peripheral walls to approximate with each other, and the peripheral walls and the bottom face overlap with each other.

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Additionally, Cohen discloses a foldable cardboard box that is folded in figure 8A that has all the respective flaps shown in fig 7a folding and collapsing onto the bottom for convenient storage. It would be obvious to fold Kao or any box for the matter in such a fashion so that the box is collapsed with all the flaps overlaying each other for the purpose of convenient storage.

Wellner also discloses a foldable cardboard box that includes a plurality of folding lines and is disclosed that it is well known in column 2 lines 18-24 to have cardboard boxes collapse and have the panels collapse inwardly upon themselves to create a flattened container. These features are interpreted as obvious and well known in the art of collapsible boxes.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kao by having the box collapse by having the panels folded inwardly so they are collapsed upon themselves as disclosed by Wellner and Cohen for the purpose of easy storage and shipping of the empty boxes with well known methods.

10. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao (US Publication No. 20040140345) in view of Masaaki (Japan Publication No. 07-091594) in view of Sinclair (US Publication No. 20020134827).

With respect to claim 45, Kao discloses the cold-insulating container of claim 34 except wherein the bottom face sheet is made of water-proof materials.

Sinclair discloses a laminate inserted on the bottom sheet of a collapsible cardboard box in paragraph 9 for the purpose of making the box water proof. It would have been obvious to one of ordinary skill in the art to modify Kao by having a laminate inside the box, on the bottom sheet, making it water proof for the purpose of transporting ice without creating a wet mess.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL CARTON whose telephone number is (571)270-7837. The examiner can normally be reached on Monday-Friday 7:30am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C./
Examiner, Art Unit 3748

/Thomas E. Denion/
Supervisory Patent Examiner, Art Unit 3748